

CLAIMS

I claim:

1. A plug for securing to a socket, the plug comprising:

a housing;

5 at least one prong, the prong having a proximal end positioned within the housing, a distal end extending from the housing, and a length;
a rotatable collar positioned around the housing; and,
a plunger positioned within the housing and functionally engaged to the rotatable collar and the prong, wherein rotation of the rotatable collar causes movement of the plunger along the
10 length of the at least one prong to translate rotation of the rotatable collar into applied force to the at least one prong thereby causing the plug to selectively clamp within the socket.

2. The plug of claim 1 wherein the at least one prong is operably connected to a cord.

3. The plug of claim 1 wherein the prong has at least one ramp and the plunger acts on the ramp.

15 4. The plug of claim 1 wherein the plunger is a sleeve-style plunger selectively moveable within the housing.

5. The plug of claim 1 wherein the plunger is a block-style plunger selectively moveable within the housing.

6. The plug of claim 1 wherein the distal end of the at least one prong is selectively moveable.

20 7. The plug of claim 1 wherein the at least one prong further comprises:

an outer blade having a proximal end positioned within the housing and a distal end extending from the housing; and

an inner blade having a proximal end functionally engaged with the plunger and a distal end extending from the housing, wherein the inner blade is pivotally connected to the outer blade such that actuation of the rotatable collar causes the distal end of the inner blade to pivot away from the distal end of the outer blade.

- 5 8. The plug of claim 7 wherein the plunger acts on the inner blade.
9. A plug for securing to a socket, the plug comprising:
 - a housing;
 - at least one prong formed by at least two blades, the at least one prong having a proximal end positioned within the housing, a distal end extending from the housing, and a length;
 - 10 a rotatable collar positioned around the housing; and,
 - a plunger positioned within the housing and functionally engaged to the rotatable collar and the prong, the plunger moveable upon rotation of the collar in a direction substantially perpendicular to the length of the prongs so as to translate rotation of the rotatable collar into selectively applied force to at least one blade of the at least one prong causing the plug to
 - 15 selectively clamp within the socket.
10. The plug of claim 9 wherein the plunger is positioned onto an extension inside the housing.
11. The plug of claim 9 wherein the rotatable collar has a non-concentric inner shape.
12. The plug of claim 9 wherein the at least one blade functionally engages a slide channel on the plunger.
- 20 13. A socket for receiving a plug having at least one prong, the socket comprising:
 - a housing;

at least one sleeve positioned within the housing to receive the at least one prong when the at least one prong is inserted unto the housing;

a rotatable collar positioned around the housing; and,

a slide member positioned within the housing and functionally engaged to the sleeve and

5 rotatable collar, the slide member being selectively moveable along the sleeve so as to translate rotation of the rotatable collar into a force applied to the at least one sleeve such that rotation of the rotatable collar causes the socket to clamp to the at least one prong.

14. The socket of claim 13 wherein the slide member acts on a ramp of the sleeve.

15. The socket of claim 13 wherein at least one sleeve is operably connected to a cord.

10 16. A method for securing a plug to a socket comprising the steps of:

inserting an engagement end of at least one prong of the plug into a receptacle of the socket;

and

actuating a rotatable collar around the plug causing a plunger within the plug to move along the prong, thereby applying force to the prong causing the plug to clamp within the socket.

15 17. The method of claim 16 wherein actuating the rotatable collar causes the at least one prong to selectively move.

18. The method of claim 16 wherein the plug comprises:

a housing;

at least one prong, the prong having a proximal end positioned within the housing, a distal

20 end extending from the housing, and a length;

a rotatable collar positioned around the housing; and,

a plunger positioned within the housing and functionally engaged to the rotatable collar and the prong, the plunger being selectively moveable along the length of the prong to translate rotation of the rotatable collar into applied force to at least one prong thereby causing the plug to clamp within a socket.

5 19. The method of claim 16 wherein the plug comprises:

an outer blade having a proximal end positioned within the housing and a distal end extending from the housing; and,

an inner blade having a proximal end that functionally engages the plunger and a distal end that extends from the housing, the inner blade pivotally connected to the outer blade such that actuation of the rotatable collar causes the distal end of the inner blade to pivot away from the distal end of the outer blade.

10 20. A method for securing a plug to a socket comprising the steps of:

inserting an engagement end of at least one prong of the plug into a receptacle of the socket, the prong having a length and at least two bars; and,

15 actuating a rotatable collar around the plug causing a plunger within the plug to move substantially perpendicularly to the length of the prong, thereby applying force to at least one bar of the prong thus clamping the plug within the socket.

21. The method of claim 20 wherein actuating the rotatable collar causes the at least one prong to selectively move.

20 22. A method for securing a plug to a socket comprising the steps of:

inserting an engagement end of at least one prong of the plug into a sleeve inside a receptacle of the socket, the sleeve having a length; and,

actuating a rotatable collar around the socket causing a slide member within the socket to move along the length of the sleeve, thereby applying force to the sleeve such that the socket clamps around the engagement end of the at least one prong.

23. An adapter for securing a standard prong to a standard socket, the adapter comprising:

5 a housing having a plug end and a socket end;

wherein the plug end comprised:

at least one prong, the prong having a proximal end positioned within the housing, a distal end extending from the housing, and a length;

a first rotatable collar positioned around the housing; and

10 a plunger positioned within the housing and functionally engaged to the first rotatable collar and the at least one prong, the plunger being moveable along the length of the at least one prong to translate rotation of the first rotatable collar into applied force to the at least one prong thereby causing the plug end to clamp within the standard socket; and

wherein the socket end comprises:

15 at least one sleeve positioned within the housing to receive the standard prong when the standard prong is inserted into the housing, the at least one sleeve operably connected to the at least one prong of the plug end;

a second rotatable collar positioned around the housing; and

20 a slide member positioned within the housing and functionally engaged to the at least one sleeve and the second rotatable collar, the slide member being moveable along the at least one sleeve thereby translating rotation of the second rotatable collar into selectively

applied force to the at least one sleeve such that rotation of the second rotatable collar causes the socket end to clamp to the standard prong.

24. An extension cord for connecting a standard prong to a standard socket, the extension cord comprising:

5 a plug end, a socket end, and a cord connecting the plug end and the socket end;

wherein the plug end comprises:

a plug end housing;

at least one prong, the prong having a proximal end positioned within the plug end housing, a distal end extending from the plug end housing, and a length;
10 a first rotatable collar positioned around the plug end housing; and
a plunger positioned within the plug end housing and functionally engaged to the first rotatable collar and the at least one prong, the plunger being moveable along the length of the at least one prong to translate rotation of the first rotatable collar into applied force to the at least one prong thereby causing the plug end to clamp within the standard socket;

15 and

wherein the socket end comprises:

at least one sleeve positioned within the housing to receive the standard prong when the standard prong is inserted into the housing, the at least one sleeve operably connected by the cord to the at least one prong of the plug end;

20 a second rotatable collar positioned around the housing; and

a slide member positioned within the housing and functionally engaged to the at least one sleeve and the second rotatable collar, the slide member being moveable along the at

least one sleeve thereby translating rotation of the second rotatable collar into selectively applied force to the at least one sleeve such that rotation of the second rotatable collar causes the socket end to clamp to the standard prong.